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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,501	04/17/2008	Henrik Nohr Kofoed	PLoug22.001APC	3691

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EXAMINER
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FRISBY, KEITH J

ART UNIT	PAPER NUMBER
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3616

NOTIFICATION DATE	DELIVERY MODE
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06/01/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/585,501	<b>Applicant(s)</b> KOFOED ET AL.	
	<b>Examiner</b> Keith Frisby	<b>Art Unit</b> 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-21 is/are rejected.
- 7) ☒ Claim(s) 4 and 22-41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20060925</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the strain gauge, the first programming device, the second programming device, the galvanic isolating device, and the data converter must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 20. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities: On page 3, line 28, "aspect the" should be changed to "aspect of the". On page 15, line 18, "1" should be changed to "3". On page 16, line 7, "causes" should be changed to "cause". On page 16, line 13, "Fig. 7 operator" should be change to "Fig. 7 the operator".

Appropriate correction is required.

***Claim Objections***

4. Claim 24 is objected to because of the following informalities: In line 2, "recieve" should be changed to "receive". Appropriate correction is required.

5. Claim 31 is objected to because of the following informalities: In line 9, "at" should be deleted. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 19 recites the limitation "the control plate" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3, 5, 11-15, 19, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujiwara et al. (US 5,746,282). Fujiwara discloses a method of manually actuating a driving and steering mechanism for a wheeled, power driven vehicle 10, said method comprising: applying a manual force to the gripping means 4 of an actuating member (in some embodiments (e.g. Fig's 42A-43B), the actuating member includes a movable body 57), decomposing the manual force into at least two components extending in mutually intersecting directions, applying each of said force components to respective transducers 51, and transmitting from each of said transducers to the steering mechanism an output signal, responsive to the strength of

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the force component received by the transducer relating to the respective direction to thereby obtain vehicle movement of greater magnitude than if the vehicle had been manually driven by the forces applied to the gripping means (col. 2, lines 46-59; col. 7, line 65 - col. 8, line 43). The actuating member is supported by and displaceable relative to a base member 1. A first force transducer senses a first force component that is manually applied in a first direction that extends in the normal direction of travel, and a second force transducer senses a second force component that is at a right angle to the first force component (Fig's 42A, 43A, 43B and 44B-45B). Fujiwara's invention inherently includes an electronic circuit. The vehicle is designed such that the driving and steering mechanism is not activated in response to environmental vibrations (col. 9, lines 4-30). Fig's 35A-37B show embodiments in which force transducers 56 have force transmitting members that extend into and engage with the walls of an associated recess in the actuating member 4. The force transmitting members are the cylindrically shaped elements that connect the upper ends of pendulums 55 to the actuating member 4.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 8-10, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. (US 5,746,282) in view of Foederer et al. (US

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3,783,707). Fujiwara teaches the limitations of claims 1 and 13 as explained above.

Fujiwara does not teach that the actuating member floats on a layer of damping grease.

Foederer teaches a plate 27 that is supported by a grease plate 31. A layer of grease between the two plates provides damping for the manual movement of the plate 27 (col. 2, lines 39-52). Such a layer of grease inherently provides one of about critical and about just overcritical damping of natural free resonance vibrations. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to improve the invention taught by Fujiwara by using the known technique of providing a layer of grease between two components as taught by Foederer in order to achieve the predictable result of providing lubrication and damping (col. 2, lines 48-52).

13. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. (US 5,746,282) in view of Sjoberg et al. (US 2006/0011403 A1).

Fujiwara teaches the limitations of claim 1 as explained above. Fujiwara does not teach a strain gauge. Sjoberg teaches an actuating device configured to manually actuate a driving and steering mechanism for a wheeled, power driven vehicle that uses cantilever beams and strain gauges 40a and 40b to detect relative movements between an actuating member 30 and a base member 20 (par. 0023). Paragraph 0039 of Sjoberg teaches that strain gauges and mechanical sensors are equivalents. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to substitute strain gauges and cantilevered beams as taught by Sjoberg for mechanical force transducers as taught by Fujiwara, since the simple substitution of a known, equivalent force transducer as taught by Sjoberg for a known, equivalent force

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transducer as taught by Fujiwara would have yielded the predictable result of detecting the relative movements of an actuating member and a base member. MPEP §2143.

***Allowable Subject Matter***

14. Claims 4 and 22-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rabjohn (US 3,380,546) discloses an actuating device configured to manually actuate a driving and steering mechanism for a wheeled, power driven vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Frisby whose telephone number is 571-270-7802. The examiner can normally be reached on M-Th 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. F./

Examiner, Art Unit 3616

/Paul N. Dickson/

Supervisory Patent Examiner, Art Unit 3616